

Claims

- [c1] 1. A method for distributing exhaust gases or gases which are ventilated from a crankcase or an evaporator of a combustion engine, which engine comprises a cylinder head with intake valves and an intake manifold with a flange for mounting on the cylinder head, the intake manifold is provided with at least one collecting channel which extends across each intake pipe of the intake manifold, wherein the gases are sucked from the collecting channel directly into each intake pipe through a non-return valve arranged in connection with each intake pipe, which non-return valve is controlled by pressure pulses from the intake valves.
- [c2] 2. A arrangement for distributing exhaust gases or gases which are ventilated from a crankcase or an evaporator of a combustion engine having a cylinder head and an intake manifold with a flange for mounting on the cylinder head, the intake manifold being equipped with at least one collecting channel which extends across each intake pipe of the intake manifold, and the collecting channel is connected to each intake pipe of the intake manifold via outlet channels with separate non-return valves.
- [c3] 3. The arrangement according to claim 2, wherein the non-return valves are located in the flange.
- [c4] 4. The arrangement according to claim 2, wherein the non-return valves are located in the cylinder head.
- [c5] 5. The arrangement according to claim 2, wherein the non-return valves constitute a part of a gasket between the flange and the cylinder head.
- [c6] 6. The arrangement according to claim 5, wherein the non-return valves comprise membranes that are resiliently and sealingly arranged against at least one opening emerging from the collecting channel.
- [c7] 7. The arrangement according to claim 6, wherein each membrane is formed in one piece with the gasket.

- [c8] 8. The arrangement according to claim 7, wherein the gasket is made as a double steel gasket, comprising a first gasket with a membrane that is in contact with the cylinder head, and a second gasket that is in contact with the intake manifold and is attached to the first gasket.
- [c9] 9. The arrangement according to claim 6, wherein the gasket is made of steel or a fiber material.
- [c10] 10. The arrangement according to claim 6, wherein the gasket is made of fiber material.
- [c11] 11. The arrangement according to claim 4, wherein the non-return valves are ball valves.
- [c12] 12. The arrangement according to claim 4, wherein the non-return valves are solenoid valves which are controlled by the electronic control system of the engine.
- [c13] 13. The arrangement according to claim 2, wherein the collecting channel is made as a through bore in the flange.
- [c14] 14. The arrangement according to claim 2, wherein the collecting channel is made as a milled recess in the flange equipped with a covering lid.
- [c15] 15. The arrangement according to claim 2, wherein the collecting channel is made as a cavity cast in the flange.
- [c16] 16. The arrangement according to claim 2, wherein the flange is integrated with the intake manifold.
- [c17] 17. The arrangement according to claim 2, wherein the flange is mounted as a separate unit between the intake manifold and the cylinder head.
- [c18] 18. The arrangement according to claim 2, wherein the collecting channel is mounted as a separate unit on the intake manifold.
- [c19] 19. A arrangement for distributing exhaust gases or gases which are ventilated

Parameter	Value	Unit
Temperature	25	°C
Pressure	1	atm
Time	10	min
Concentration	0.1	M
Volume	10	ml
Mass	1.0	g
Length	10	cm
Area	100	cm ²
Volume	1000	ml
Mass	100	g
Length	100	cm
Area	10000	cm ²
Volume	100000	ml
Mass	10000	g
Length	10000	cm
Area	1000000	cm ²
Volume	10000000	ml
Mass	1000000	g
Length	1000000	cm
Area	100000000	cm ²
Volume	1000000000	ml
Mass	100000000	g
Length	100000000	cm
Area	10000000000	cm ²
Volume	100000000000	ml
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Volume	1000000000000000000000000000000000000000	ml
Mass	100	g
Length	1000	cm
Area	100	cm ²
Volume	1000	ml
Mass	100	g
Length	1000	cm
Area	100	cm ²
Volume	1000	ml
Mass	100	g
Length	100000000000000	